

S.N. 09/544,141

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4. (Canceled)

5. (Previously Presented) A method for providing a wireless terminal of a communication system access to at least a phonebook database of the system, comprising:

- (a) for incoming phone calls to said wireless terminal
 - identifying phone number of a caller at said wireless terminal;
 - instructing the system to search said phonebook database to identify name of caller; and
 - sending results of the search to said wireless terminal, such that
 - (i) if caller identity search is successful, identification of caller is presented at said wireless terminal, and
 - (ii) if the caller identity search is not successful, the caller phone number is presented only at said wireless terminal, and
- (b) for outgoing calls to be made from said wireless terminal
 - instructing the system to search said phonebook database to locate at least one of a phone number and destination of an outgoing call; and
 - sending results of the search to said wireless terminal such that

S.N. 09/544,141

(i) if the phone number/destination of the call to be made is found in the database, the same is presented at said wireless terminal, and

(ii) if the phone number/destination is not found in an initial search query of the database, the wireless terminal user, optionally, may modify the search query of the system to the phonebook database or terminate identification process,

wherein identification of caller of an incoming call or person or party to be called includes showing at least one of name and affiliation and, when stored in the phonebook database, showing picture of person on a display of said wireless terminal.

6. (Previously Presented) A method for providing a wireless terminal of a communication system access to at least a phonebook database of the system, comprising:

- (a) for incoming phone calls to said wireless terminal
- identifying phone number of a caller at said wireless terminal;
- instructing the system to search said phonebook database to identify name of caller; and
- sending results of the search to said wireless terminal, such that
- (i) if caller identity search is successful, identification of caller is presented at said wireless terminal, and
- (ii) if the caller identity search is not successful, the caller phone number is presented only at said wireless terminal, and

S.N. 09/544,141

(b) for outgoing calls to be made from said wireless terminal
instructing the system to search said phonebook database to
locate at least one of a phone number and destination of an outgoing call; and
sending results of the search to said wireless terminal such that

(i) if the phone number/destination of the call to be made is
found in the database, the same is presented at said wireless terminal, and

(ii) if the phone number/destination is not found in an initial
search query of the database, the wireless terminal user, optionally, may
modify the search query of the system to the phonebook database or
terminate identification process,

wherein said communication system comprises a Wireless Local
Area Network (WLAN) and said phonebook database is provided in the
network, and

wherein the instruction to search said phonebook database to
identify the name of caller of said incoming call or at least one of a phone
number and destination of said outgoing call to be made is effected over said
WLAN and an Internet Protocol (IP)-based online link-up of said wireless
terminal and the network and comprises:

instructing the system, to start a phonebook application, and
performing search query of said phonebook database to identify
caller of an incoming call or performing one or a successive number of new or
modified search queries, as deemed appropriate by the terminal user, through

S.N. 09/544,141

a user interface (UI) provided at said wireless terminal to locate the phone number and destination of a call to be made.

7. (Original) The method according to claim 6, wherein said phonebook application is commenced when, for an incoming call, the phone number is determined not to be locally stored in said wireless terminal and, for an outgoing call, at least one of phone number and destination of the call to be made is determined not to be locally stored in said wireless terminal.

8. (Original) The method according to claim 6, wherein said phonebook application is a World Wide Web (WWW) IP-based application using Hypertext Transfer Protocol (HTTP) to transmit information between said wireless terminal and a WWW server having access to the phonebook database, and using a Hypertext Mark-up Language (HTML) browser to query a database in said wireless terminal.

9. (Original) The method according to claim 6, wherein said phonebook application is a Wireless Application Protocol (WAP)-based phonebook application using a WAP browser for Wireless Application Environment (WAE) to access a database in said wireless terminal and a protocol application to access a WAP or WWW server having access to said phonebook database.

10. (Original) The method according to claim 6, wherein said phonebook application is a query-based contacts application in which Lightweight Directory Access Protocol(LDAP) is used to transmit information between said wireless terminal and a Directory System Agent (DSA) server having access to said phonebook database.

11. (Original) The method according to claim 6, wherein listings of matched contents associated with each said query are viewed at a user terminal so that client requesting information can make a selection from the listing or instruct the system to make a new or modified query to the phonebook database.

12. (Original) The method according to claim 11, wherein individual query outcomes are viewed through a browsable window at a user terminal and the like.

13. (Previously Presented) A method for providing a wireless terminal of a communication system access to at least a phonebook database of the system, comprising:

(a) for incoming phone calls to said wireless terminal
identifying phone number of a caller at said wireless terminal;
instructing the system to search said phonebook database to
identify name of caller; and

sending results of the search to said wireless terminal, such that

(i) if caller identity search is successful, identification of caller is presented at said wireless terminal, and

(ii) if the caller identity search is not successful, the caller phone number is presented only at said wireless terminal, and

(b) for outgoing calls to be made from said wireless terminal

instructing the system to search said phonebook database to locate at least one of a phone number and destination of an outgoing call; and

sending results of the search to said wireless terminal such that

(i) if the phone number/destination of the call to be made is found in the database, the same is presented at said wireless terminal, and

(ii) if the phone number/destination is not found in an initial search query of the database, the wireless terminal user, optionally, may modify the search query of the system to the phonebook database or terminate identification process,

wherein said phonebook database is available wirelessly to the user terminal through a secured online access and comprises phone number(s), address(es), name and picture, if available, and profile information of personnel/clients of a company or corporation, a company plant, or organization/association and the like, and

wherein the phone numbers in said phonebook database comprise phone numbers of office phones, facsimile phones, cell and mobile phones, pagers and handheld devices including PDAs (Personal Digital

S.N. 09/544,141

Assistants) and palm units with and without voice capability, said phonebook database further comprising contact addresses and terminal addresses including E-mail addresses of desktop and portable computers and the like.

14. (Original) The method according to claim 13, wherein said search query associated with the outgoing call to be made is limited by search criteria employed, said search criteria comprising any one or more items from the list consisting of:

a name and contact information including address, phone number(s), facsimile number(s), an E-mail address and the like; a title of person in company/organization; a unit, plant or branch of company; a project group or work team; a building/site location; picture of person; and a person's administrative assistant.

15. (Previously Presented) A method for providing a wireless terminal of a communication system access to at least a phonebook database of the system, comprising:

(a) for incoming phone calls to said wireless terminal
identifying phone number of a caller at said wireless terminal;
instructing the system to search said phonebook database to
identify name of caller; and
sending results of the search to said wireless terminal, such that

S.N. 09/544,141

- (i) if caller identity search is successful, identification of caller is presented at said wireless terminal, and
- (ii) if the caller identity search is not successful, the caller phone number is presented only at said wireless terminal, and
- (b) for outgoing calls to be made from said wireless terminal
 - instructing the system to search said phonebook database to locate at least one of a phone number and destination of an outgoing call; and
 - sending results of the search to said wireless terminal such that
 - (i) if the phone number/destination of the call to be made is found in the database, the same is presented at said wireless terminal, and
 - (ii) if the phone number/destination is not found in an initial search query of the database, the wireless terminal user, optionally, may modify the search query of the system to the phonebook database or terminate identification process, and further comprising:
 - providing a journal viewing application in which said communication system searches a journal database for background information associated with at least one of a caller of an incoming phone call and a phone number or person/party of an outgoing call to be made and sends results of the background information search to said wireless terminal.

16. (Original) The method according to claim 15, wherein the background information stored in said journal database which is available to a user terminal of said system, including said wireless terminal, comprises:

previous phone calls, originating and terminating, including dates, times and durations; E-mails; task lists; documents associated with originating or terminating call; a project; a calendar date; and a company or plant associated with originating or terminating call.

17. (Original) In a communication system having an infrastructure comprising at least one wireless terminal, at least one access point and a wired backbone, a method for providing to each said wireless terminal thereof online access capability to at least a phonebook database of the system comprising:

instructing the system to start a phonebook application, wherein for incoming calls the phonebook application commences in response to a phone number identification at user terminal side and for outgoing calls the phonebook application commences through a user interface (UI) of said wireless terminal; and

performing a search query of said phonebook database to identify at least one of (i) a caller corresponding to a phone number identification of an incoming call and (ii) at least one of a phone number and destination of an outgoing call to be made.

18. (Original) The method according to claim 17,

wherein said communication system comprises a Wireless Local Area Network (WLAN) and said phonebook database is a network database, and

wherein said phonebook application is a World Wide Web (WWW) IP-based application using Hypertext Transfer Protocol (HTTP) to transmit information between said wireless terminal and a WWW server, included in the network, having access to the phonebook database and using a Hypertext Mark-up Language (HTML) browser to query a database in said wireless terminal.

19. (Original) The method according to claim 17,

wherein said communication system comprises a Wireless Local Area Network (WLAN) and said phonebook database is a network database, and

wherein said phonebook application is a Wireless Application Protocol (WAP)-based phonebook application using a WAP browser for Wireless Application Environment (WAE) to access a database in said wireless terminal and a transport interface to access a WAP or WWW server, included in the network, having access to said phonebook database.

20. (Original) The method according to claim 17,

wherein said communication system comprises a Wireless Local Area Network (WLAN) and said phonebook database is a network database, and

wherein said phonebook application is a query-based contacts application in which Lightweight Directory Access Protocol (LDAP) is used to transmit information between said wireless terminal and a Directory System Agent (DSA) server, included in the network, having access to said phonebook database.

21. (Original) The method according to claim 17,

wherein said communication network comprises a Wireless Local Area Network (WLAN) and said phonebook database is provided in the network, and

wherein said phonebook application is performed using a protocol application comprising an application taken from the list consisting of Wireless Application Protocol (WAP), Hypertext Transfer Protocol (HTTP), and Lightweight Directory Access Protocol (LDAP).

22. (Original) The method according to claim 17, wherein said phonebook application is commenced when, for an incoming call, the phone number is determined not to be locally stored in said wireless terminal and, for

an outgoing call, at least one of the phone numbers and destination of the call to be made is determined not to be locally stored in said wireless terminal.

23. (Original) The method according to claim 17, wherein said search query associated with the outgoing call to be made comprises:

at least one query, based on a search criteria sent through the user interface of said wireless terminal, to find at least one of a phone number and name of a person or party to be called, said search query conforming to a Wireless Local Area Network (WLAN)-based transport protocol or a WLAN-based protocol over the internet and performed by a server in the network having access to said phonebook data base.

24. (Original) The method according to claim 23,

wherein said phonebook database is available wirelessly to a user terminal through a secured online access over the internet and comprises phone number(s), name and profile information of personnel/clients of a company or corporation, a company plant, or organization/association and the like, and

wherein the phone numbers in said phonebook database comprise phone numbers of office phones, facsimile phones, cell and mobile phones, pagers and handheld devices including Personal Digital Assistants (PDAs) and palm units with and without voice capability, said phonebook

S.N. 09/544,141

database further comprising contact addresses and terminal addresses including E-mail addresses of desktop and portable computers and the like.

25. (Original) The method according to claim 24, wherein said search criteria of said search query associated with the outgoing call to be made contains any one or more items from the list consisting of: a name and contact information including address, phone number(s), facsimile number(s) an E-mail address and the like; a title of person in company/organization; a unit, plant or branch of company; a project group or work team; a building/site location; picture of person; and a person's administrative assistant.

26. (Original) The method according to claim 23, wherein listings of matched contents associated with each said query are viewed at a user terminal so that client requesting information can make a selection from the listing or instruct the system to make a new or modified query to the phonebook database.

27. (Original) The method according to claim 17, further comprising providing a journal viewing application in which said communication system searches a journal database for background information associated with at least one of a caller of an incoming phone call and a phone number or person/party of an outgoing call to be made and sends results of the background information search to said wireless terminal.

28. (Original) The method according to claim 27, wherein the background information stored in said journal database which is available to a user terminal of said system, including said wireless terminal, comprises:

previous phone calls, originating and terminating, including dates, times and durations; E-mails; task lists; documents associated with originating or terminating call; a project; a calendar data; and a company or plant associated with originating or terminating call.

Claim 29. (Canceled)

30. (Previously Presented) A method for providing a wireless terminal of communication system access to at least a journal database, comprising:

instructing the system to start a journal viewing application to obtain background information related to occurrence of an incoming call or an outgoing call to be made; and

performing a search query of said journal database to locate the background information, the search query including a call identification process in which either an incoming call phone number or at least one of a phone number and name of person or party of an outgoing call to be made is matched to background information associated therewith in said journal database; and

presenting the matched background information to said wireless terminal,

wherein the background information which is stored in said journal database and is available to a user terminal of said system, including said wireless terminal, comprises:

previous phone calls, originating and terminating, including dates, times and durations; E-mails; task lists; documents associated with originating or terminating call; a project; a calendar data; and a company or plant associated with originating or terminating call.

31. (Original) The method according to claim 30, wherein the background information presented to said wireless terminal is filtered and organized, including having headings, through settings chosen by the terminal user, the filtered settings may be varied for originating and terminating calls.

32. (Original) The method according to claim 31,
wherein information displayed on a wireless terminal comprises:
recent phone calls, originating and terminating; task headings;
E-mail headings; and related documents.

Claim 33. (Canceled)

34. (Previously Presented) A method for providing a wireless terminal of communication system access to at least a journal database, comprising:

S.N. 09/544,141

instructing the system to start a journal viewing application to obtain background information related to occurrence of an incoming call or an outgoing call to be made; and

performing a search query of said journal database to locate the background information, the search query including a call identification process in which either an incoming call phone number or at least one of a phone number and name of person or party of an outgoing call to be made is matched to background information associated therewith in said journal database; and

presenting the matched background information to said wireless terminal,

wherein said journal viewing application is a World Wide Web (WWW) IP-based application using Hypertext Transfer Protocol (HTTP) to transmit information between said wireless terminal, and a WWW server, included in the network, having access to said journal database and using a Hypertext Mark-up Language (HTML) browser to query a database in said wireless terminal.

35. (Previously Presented) A method for providing a wireless terminal of communication system access to at least a journal database, comprising:

instructing the system to start a journal viewing application to obtain background information related to occurrence of an incoming call or an outgoing call to be made; and

performing a search query of said journal database to locate the background information, the search query including a call identification process in which either an incoming call phone number or at least one of a phone number and name of person or party of an outgoing call to be made is matched to background information associated therewith in said journal database; and

presenting the matched background information to said wireless terminal,

wherein said journal viewing application is a Wireless Application Protocol (WAP)-based application using a WAP browser for Wireless Application Environment (WAE) to access a database in said wireless terminal and using a transport interface to access a WAP server, included in the network, having access to said journal database.

36. (Previously Presented) A method for providing a wireless terminal of communication system access to at least a journal database, comprising:

instructing the system to start a journal viewing application to obtain background information related to occurrence of an incoming call or an outgoing call to be made; and

performing a search query of said journal database to locate the background information, the search query including a call identification process in which either an incoming call phone number or at least one of a phone number and name of person or party of an outgoing call to be made is

S.N. 09/544,141

matched to background information associated therewith in said journal database; and

presenting the matched background information to said wireless terminal,

wherein said journal viewing application is a query-based contacts application in which Lightweight Directory Access Protocol (LDAP) is used to transmit information between said wireless terminal and a Directory System Agent (DSA) server, included in the network, having access to said journal database.

Claims 37-39. (Canceled)

40. (Previously Presented) A system to provide a wireless terminal of a network access to a phonebook database of the network, comprising:

a network having at least one server and at least a phonebook database;

at least one wireless terminal each of which is operably connected to said network;

at least one transport interface to allow communication between each wireless terminal and said network; and

a phonebook application, included in said network, said phonebook application being such that (a) for an incoming call, the network is instructed to search said phonebook database to identify name of caller, and (b) for an

S.N. 09/544,141

outgoing call, the network is instructed to search said phonebook database to locate at least one of a phone number and name of person or party of a call to be made, wherein the result of each search is presented at said wireless terminal,

wherein for incoming calls said phonebook application commences in response to a phone number identification at said wireless terminal and for outgoing calls, said phonebook application commences through a user interface (UI) of said wireless terminal.

41. (Original) The system according to claim 40, wherein said wireless terminal is continuously maintained in the network to permit uninterrupted communication between said wireless terminal and a server associated with said phonebook database.

42. (Original) The system according to claim 41, wherein said transport interface comprises an interface taken from the list consisting of a Wireless Application Protocol (WAP) interface, a Hypertext Transfer Protocol (HTTP) interface and a Lightweight Directory Access Protocol (LDAP) interface.

43. (Original) The system according to claim 42, wherein said wireless terminal comprises a terminal taken from the list consisting of a wireless

phone, a personal digital assistant (PDA), a palmtop device, and a portable computer with wireless capability and phone hookup capability.

44. (Original) The system according to claim 43, wherein voice communication between a wireless terminal and another user terminal in said network is effected using Voice Over Internet Protocol (VoIP).

45. (Original) The system according to claim 43, wherein said wireless terminal has both voice and display capability in which voice communication is effected through a headset attachment part of said wireless terminal to allow viewing a wireless terminal display while exchanging voice information.

46. (Previously Presented) A system to provide a wireless terminal of a network access to a phonebook database of the network, comprising:

- a network having at least one server and at least a phonebook database;

- at least one wireless terminal each of which is operably connected to said network;

- at least one transport interface to allow communication between each wireless terminal and said network; and

- a phonebook application, included in said network, said phonebook application being such that (a) for an incoming call, the network is instructed to search said phonebook database to identify name of caller, and

(b) for an outgoing call, the network is instructed to search said phonebook database to locate at least one of a phone number and name of person or party of a call to be made, wherein the result of each search is presented at said wireless terminal,

wherein said network further includes a journal viewing application and a journal database, said journal viewing application instructing the network to search said journal database for background information associated with at least one of a caller of an incoming phone call and a phone number or person/party of an outgoing call to be made and sends results of the background information search to said wireless terminal.

47. (Original) The system according to claim 46,

wherein the background information stored in said journal database which is available to each user terminal of said network, including said wireless terminal, having display capability, comprises:

previous phone calls, originating and terminating, including dates, times and durations; E-mails; task lists; documents associated with originating or terminating call; a project; a calendar data; and a company or plant associated with originating or terminating call.

48. (Original) The system according to claim 47,

wherein contents of said phonebook database and of said journal database are available wirelessly to said user terminal through a secured online access over the internet,

wherein said phonebook database comprises phone number(s), name and profile information of personnel/clients of a company or corporation, a company plant, or organization/association and the like, and

wherein the phone numbers in said phonebook database comprise phone numbers of office phones, facsimile phones, cell and mobile phones, pagers and handheld devices including PDAs (Personal Digital Assistants) and palm units with and without voice capability, said phonebook database further comprising contact addresses and terminal addresses including E-mail addresses of desktop and portable computers and the like.

49. (Original) The system according to claim 48, wherein one or more search queries associated with an outgoing call are made of said phonebook database, each search query is limited to search criteria inputted at a User Interface (UI) of said wireless terminal and comprises any one or more items from the list consisting of:

a name and contact information including address, phone number(s), facsimile number(s), an E-mail address and the like; a title of person in company/organization; a unit, plant or branch of company; a project group or work team; a building/site location; picture of person; and a person's

S.N. 09/544,141

administrative assistant.

50. (Original) The system according to claim 42, wherein said network comprises a Wireless Local Area Network (WLAN) including a plurality of wireless terminals, at least one access point, a server farm and a backbone infrastructure to support each wireless terminal, each access point and each network server.

51. (Original) The system according to claim 41, wherein said phonebook application is a World Wide Web (WWW) IP-based application using Hypertext Transfer Protocol (HTTP) to transmit information between a wireless terminal and a WWW server having the phonebook database and using a Hypertext Mark-up Language (HTML) browser to query a database in said wireless terminal.

52. (Original) The system according to claim 41, wherein said phonebook application is a Wireless Application Protocol (WAP)-based phonebook application using a WAP browser for Wireless Application Environment (WAE) to access a database in a wireless terminal and transport interface to access a WAP or WWW server having access to said phonebook database.

53. (Original) The system according to claim 41, wherein said phonebook application is a query-based contacts application in which Lightweight Directory Access Protocol (LDAP) is used to transmit information between a wireless terminal and a Directory System Agent (DSA) server having access to said phonebook database.

54. (Original) A system to provide a wireless terminal of a network access to at least a journal database of the network, comprising:

- a network having at least one server and at least a phonebook database;

- at least one wireless terminal each of which is operably connected to said network;

- at least one transport interface to allow communication between each wireless terminal and said network; and

- a journal viewing application, included in said network, said journal viewing application detailing background information related to an incoming call or an outgoing call to be made and including

- (i) performing a search query of said journal database to locate the background information, the search query including a call identification process in which either an incoming call phone number or at least one of a phone number and name of person or party of an outgoing call to be made is matched to background information associated therewith in said journal database, and

(ii) presenting the matched background information to said wireless terminal.

55. (Original) A system according to claim 54, wherein the background information which is stored in said journal database and is available to a user terminal of said system, including said wireless terminal, comprises:

previous phone calls, originating and terminating, including dates, times and durations; E-mails; task lists; documents associated with originating or terminating call; a project; a calendar data; and a company or plant associated with originating or terminating call.

56. (Original) A system according to claim 55, wherein the background information presented to said wireless terminal is filtered and organized, including having headings, through settings chosen by the terminal user, the filtered settings may be varied for originating and terminating calls.

57. (Original) A system according to claim 56, wherein information displayed on a wireless terminal comprises:

recent phone calls, originating and terminating; task headings; E-mail headings, and related documents.

58. (Original) A system according to claim 57, wherein said network comprises a plurality of wireless terminals, at least one access point, a server farm and a backbone infrastructure to support each wireless terminal, each access point and each network server.

59. (Original) The system according to claim 58, wherein said journal viewing application is a World Wide Web (WWW) IP-based application using Hypertext Transfer Protocol (HTTP) to transmit information between said wireless terminal and a WWW server having access to said journal database, and using a Hypertext mark-up Language (HTML) browser to query a database in said wireless terminal.

60. (Original) The system according to claim 58, wherein said journal viewing application is a Wireless Application Protocol (WAP)-based journal viewing application using a WAP browser for Wireless Application Environment (WAE) to access database in said wireless terminal and using a transport interface to access a WAP server having access to said journal database.

61. (Original) The system according to claim 58, wherein said journal viewing application is a query-based contacts application in which Lightweight Directory Access Protocol (LDAP) is used to transmit information between said wireless terminal and a Directory System Agent (DSA).

S.N. 09/544,141

62. (Original) The system according to claim 54, wherein said wireless terminal further has voice over internet protocol (VoIP) capability.

63. (Original) The system according to claim 54, wherein said wireless terminal comprises a terminal taken from the list consisting of a wireless phone, a Personal Digital Assistant (PDA), a palmtop device, and a portable computer with wireless capability and with/without phone hookup capability.

Claims 64-67. (Canceled)